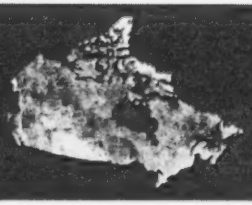

Canadian Natural Gas

›› Monthly Market Update

July 2008

›› Natural Gas Division
Petroleum Resources Branch
Energy Sector

Natural Resources Canada | Ressources naturelles Canada

Canada

Foreword

ate is a
The *Canadian Natural Gas: Monthly Market Upd*as Division
monthly working paper prepared by the Natural G
of Natural Resources Canada.

Structure and Format of the Report
vailable data
This six page report provides the most recently a
ffecting
on natural gas prices and on key fundamentals af
prices.

ides a brief,
To the right is an Executive Summary, which pro
ntals. For
up-to-date overview of natural gas market fundam
of the report
those interested in reading ahead, the remainder s associated
consists of graphs, with limited text and comment
f the natural
with each. The text provides a short description o
nparative
gas market fundamental, followed by a simple com) of the
analysis (i.e., year-over-year or month-over-month
data contained within the figure.

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Beginning in January 2005, this report has been fo computer
landscape orientation to be more easily read on a
screen.

Sources
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Various sources are used in developing this report
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Statistics Canada, Canadian Enerdata, Daily Oil Bns. *Data is*
National Energy Board and GLJ Energy Publicatio
subject to revision.

ns please
If you have any comments, suggestions or questio
t
contact Ryan Creighton at 992-1023, or by email a
rcreight@nrcan.gc.ca

Rapport aussi disponible en français

Executive Summary

The chart below depicts percentage changes (given the most recently available month of data) in natural gas prices, heating degree days (weather), natural gas domestic sales and exports, imports, storage, drilling, and natural gas production.

Natural Gas Market Fundamental	Percentage Change	
	Year-to-Year	Month-to-Month
Prices	75%	12%
Heating Degree Days	16%	-41%
Production	-6%	-3%
Sales	17%	-22%
Exports	-18%	-14%
Imports	20%	2%
Storage	-19%	29%
Drilling	-38%	91%

PRICES: CDN $10.77/GJ in July 2008; an increase of 75%

HDDs: 193 in May 2008; an increase of 16%

PRODUCTION: 445 Bcf in May 2008; a decrease of 6%.

SALES: 177 Bcf in May 2008; an increase of 17%

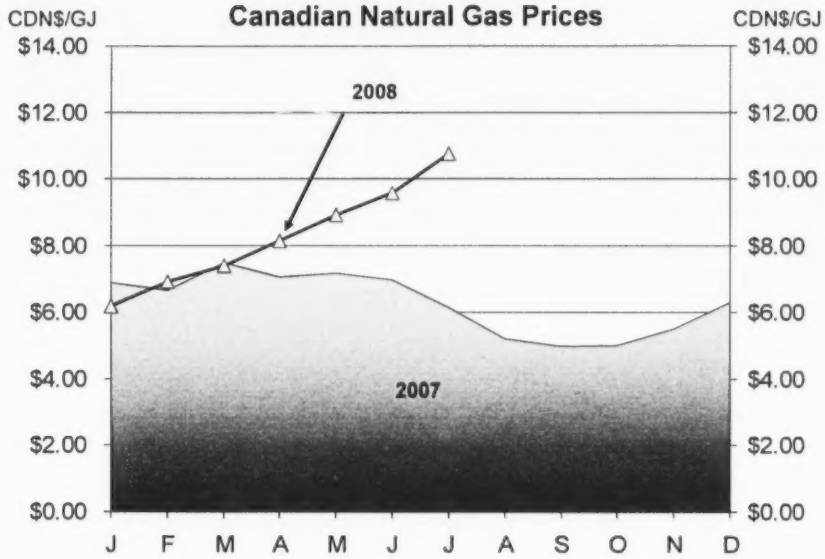
EXPORTS: 259 Bcf in May 2008; a decrease of 18%

IMPORTS: 42 Bcf in May 2008; an increase of 20%

STORAGE: 357 Bcf in July 2008; a decrease of 19%

DRILLING: 409 in July 2008; a decrease of 38%

Figure 1

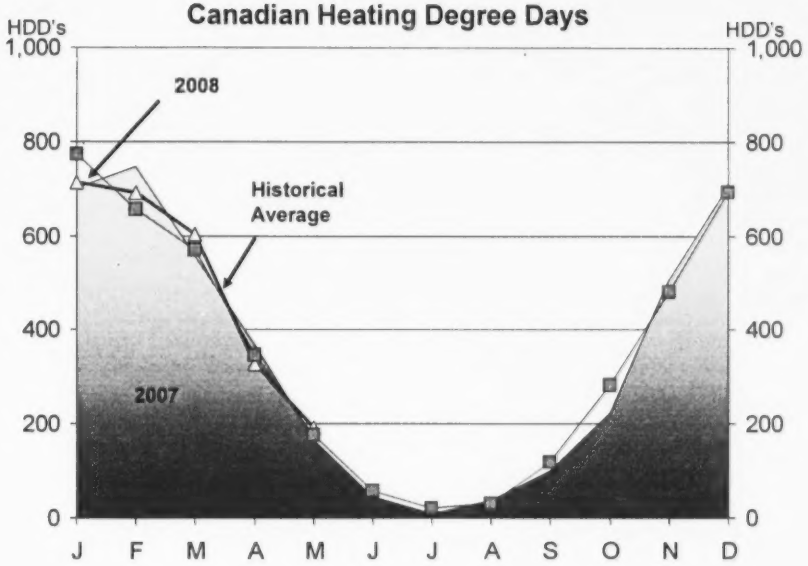


Source: GLJ Energy Publications **Note:** Canadian price is the Alberta price at the AECO hub.

Figure 1 illustrates the price of natural gas at the major Canadian pricing point – the Intra-Alberta market. The price is for gas delivered under a 30-day contract. The Intra-Alberta market is formed by gas delivered to pipelines in Alberta. Gas changes hands via Nova Inventory Transfers (NIT), exchanges at the AECO storage hub, or sales facilitated by the Natural Gas Exchange (NGX). This is a commodity price – a wholesale price in the producing area. Consumer (or "burner tip") prices will also include pipeline transmission and distribution costs, which vary across Canada. Natural gas is commonly measured in gigajoules (GJ) or cubic metres. A gigajoule is an energy unit, which equates to about 27 cubic metres of natural gas.

Canadian natural gas commodity prices were CDN $10.77/GJ in July 2008, 12% higher than the previous month and 75% higher than July 2007.

Figure 2



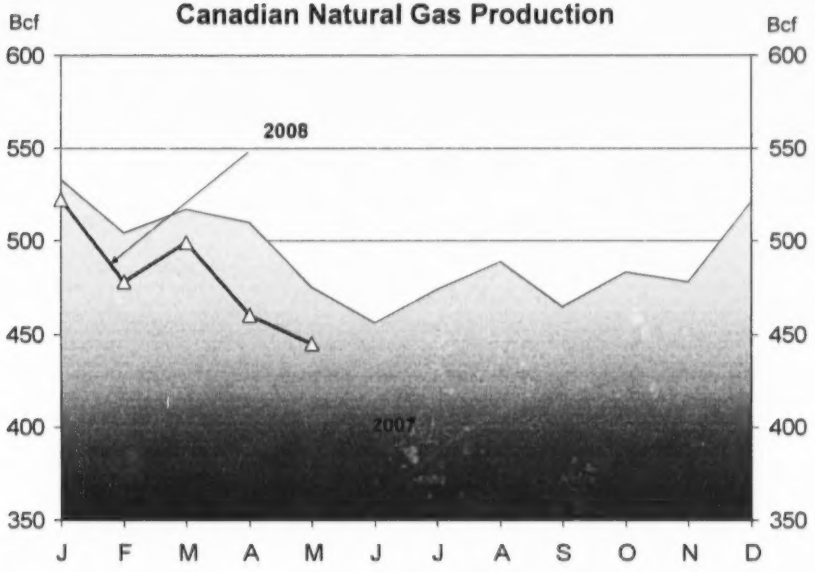
Source: Statistics Canada

Figure 2 shows Canadian heating degree days (HDDs), which are a measure of how cold it is. The more HDDs in any season, the greater is natural gas demand for space heating. If the winter is unusually cold, demand will respond accordingly and natural gas prices will tend to be stronger. However, if the winter is mild, demand will be weaker, which will tend to moderate prices.

In May 2008, there were 193 HDDs, 16% more than May 2007. Temperatures in May 2008 were 10% cooler than normal.

Figure 3

Canadian Natural Gas Production



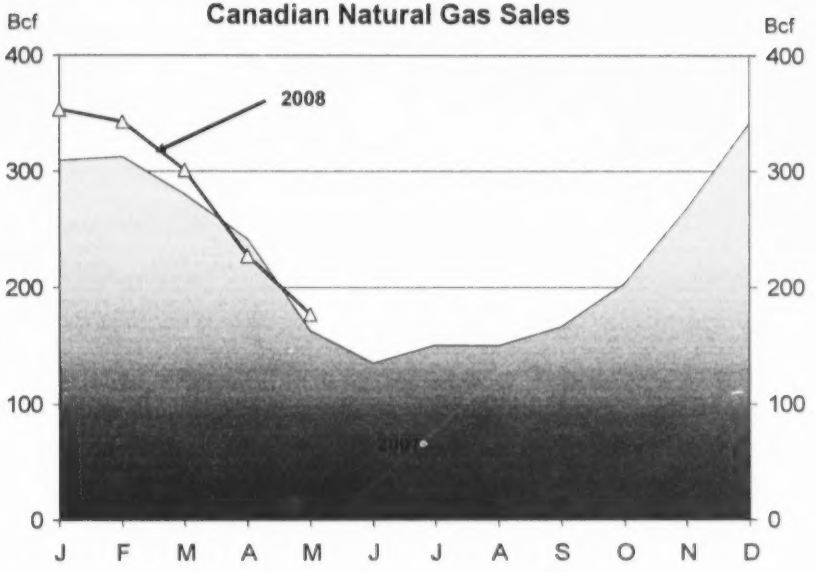
Source: Statistics Canada **Note:** Most recent month is a preliminary figure.

Figure 3 shows marketable natural gas production in Canada. Marketable natural gas is the gas available for consumption after processing and excludes producer or plant uses.

Marketable natural gas production for May 2008 was 445 Bcf, 6% lower than May 2007.

Figure 4

Canadian Natural Gas Sales



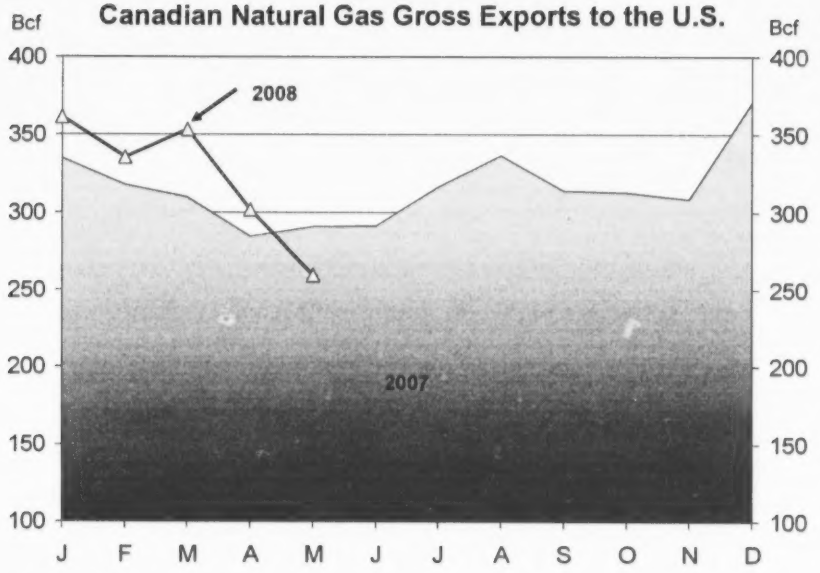
Source: Statistics Canada **Note:** Most recent month is a preliminary figure.

Figure 4 illustrates total Canadian natural gas sales. Sales include all natural gas sold to residential and commercial users (for space and water heating, cooking, etc), industries and electricity generating units in Canada. The totals do not include consumption by the natural gas industry itself (e.g., pipeline compressor fuel).

Natural gas sales to Canadian consumers in May 2008 were 177 Bcf, 17% more than May 2007.

Figure 5

Canadian Natural Gas Gross Exports to the U.S.



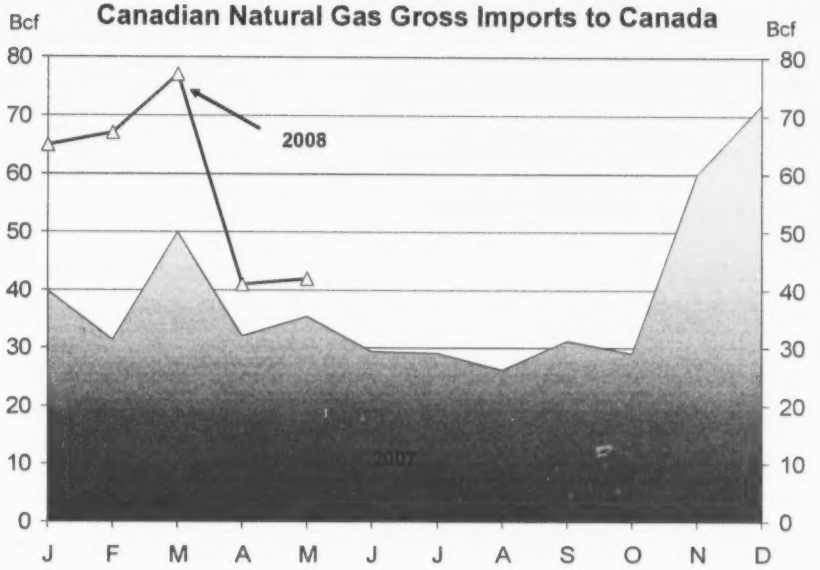
Source: National Energy Board

Figure 5 illustrates natural gas exports to the U.S. Canadian natural gas requirements are met entirely by domestic sources, as Canada produces natural gas in excess of what is required for domestic consumption. In comparison, the U.S. consumes more natural gas than it produces, therefore natural gas imports are required to make up the difference. Typically, Canada exports between 50 and 60 per cent of its gas production.

In May 2008, natural gas exports to the U.S. were 259 Bcf, 18% lower than May 2007.

Figure 6

Canadian Natural Gas Gross Imports to Canada



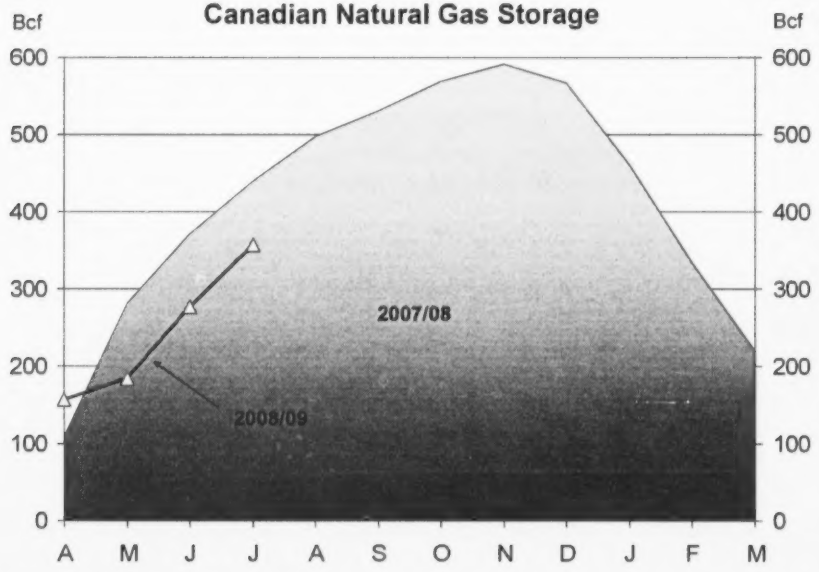
Source: National Energy Board

Figure 6 illustrates natural gas imports to Canada. Most natural gas is imported into Canada through major import points in southern Ontario. Imports into southern Ontario will likely rise in the future, as the province purchases more gas from the rest of North America due to flat production in the Western Canadian Sedimentary Basin. Presently, import volumes are significantly less than export volumes, and Canada remains a net exporter of natural gas.

In May 2008, natural gas imports to Canada were 42 Bcf, 20% higher than May 2007.

Figure 7

Canadian Natural Gas Storage



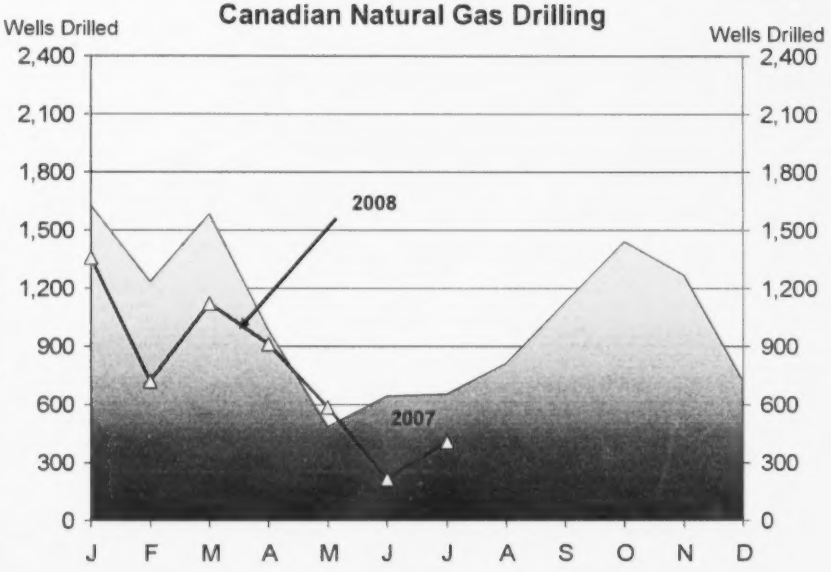
Source: Canadian Enerdata

Figure 7 indicates natural gas storage levels in Canada. The amount of gas in storage generally follows a seasonal pattern. In the summer, when natural gas demand is low, gas is injected into storage. Storage volumes peak in the fall. In winter, volumes are drawn down, reaching a low point in the spring.

Canadian natural gas storage inventories increased 80 Bcf during the month of June 2008. Storage levels at the beginning July 2008 were 357 Bcf, 19% lower than the year prior.

Figure 8

Canadian Natural Gas Drilling



Source: Daily Oil Bulletin

Figure 8 depicts the number of natural gas well completions in Canada. There is a time-lag between drilling a gas well and starting production, due to the work necessary to connect the new well to the pipeline grid. Drilling is therefore a good indicator of future natural gas supply.

There were 409 natural gas wells drilled in July 2008, a decrease of 38% from July 2007.

Bibliography and Data Sources

1. *Crude Oil and Natural Gas (Preliminary)*, Statistics Canada
2. *Natural Gas Transportation and Distribution, 55-002*, Statistics Canada
3. *Supply and Disposition of Crude Oil and Natural Gas, 26-006*, Statistics Canada
4. *Drilling Highlights*, Daily Oil Bulletin website: www.dailyoilbulletin.com
5. Canadian Natural Gas Focus, GLJ Energy Publications Inc.
6. *Natural Gas Storage Survey*, Canadian Enerdata Ltd.
7. *Natural Gas Export Statistics*, National Energy Board website: www.neb-one.gc.ca